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ABSTRACT

This discussion paper is intended to inform the further development of the National Research and Evaluation Strategy (NRES) by strengthening its focus on evaluation in Australian vocational education and training (VET). Chapter 1 discusses the implications for the role of evaluation that changes in VET have caused in the past decade. Chapter 2 focuses on these dimensions of evaluation: for what purpose, by whom, and using which approach. Chapter 3 outlines these focus areas of current evaluation activities, from the largest scale to the smallest: evaluation of national performance; evaluation of policies and national initiatives; evaluation of practice; consumer evaluation of training provision; and critique of policies and programs. Chapter 4 describes these three outcomes to assist the use of evaluative methods to support decision making that could be achieved by extending the NRES: (1) a useful level of evaluative activities; (2) a capacity to evaluate; and (3) an informed and robust critique. Two appendixes are "The Performance of the VET System: Further Details" and "Some Possible Topics for Evaluation of National Initiatives." (YLB)

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Towards evidence-based vocational education and training

ROD MCDONALD

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Summary

Background

The changes that have occurred in vocational education and training over the last decade have profound implications for the role of evaluation. There has been a transition from a supply-side system to one which is moving towards demand-side structures, with funding more tied to outputs rather than inputs; the range of training providers is becoming more diverse; and there has been a change in emphasis from external controls to quality assurance mechanisms. Equally significant is that these transitions have occurred in a system in which there has been considerable integration of policy-making and practice which crosses the boundaries of both traditional federal/State jurisdictions and government/industry responsibilities. All of these developments lead to a strong case for the development of new forms of accountability.

To ensure that future decisions on vocational education and training are well founded the *National research and evaluation strategy* has been developed, administered by the National Centre for Vocational Education Research (NCVER). This discussion paper is intended to inform the further development of the national strategy by strengthening its focus on evaluation.

The state of evaluation in Australia

Unlike research and development, evaluation is not justified in its own right. More or better evaluations will not necessarily improve the quality of education and training that people receive: it is the way in which evaluative information is used that is the key. For this reason the most important need is for structures, systems and ways of thinking that are based on informed judgement—for which competent evaluations are the fodder.

An analysis of evaluation at different levels of the vocational education and training system suggests that there is an uneven distribution of levels of evaluative activity and expertise:

	National	**State/Territory**	**Local** (providers/ITABs)
Levels of activity	Quantitative: OK Qualitative: development needed	High in one or two States; low elsewhere	Highly variable
Capacity to evaluate	OK	High in one or two States; low elsewhere	Generally low; some pockets of high skill
Critique	Little	Largely absent	Generally low; some pockets of high skill

Extending the evaluation aspects of the national strategy

Evaluation is not always worth doing: sometimes it is not an effective use of resources, it may not always be an appropriate response and, in a number of cases, the will to evaluate does not exist. What a national strategy can achieve, however, is a number of outcomes which will assist the use of evaluative methods to support decision-making.

This could be done by extending the existing *National research and evaluation strategy* to achieve the following additional outcomes:

- *A useful level of evaluative activities*
  The vocational education and training sector should aim for a situation in which training providers and enterprises plan and make decisions on the basis of a sensible and systematic use of evaluative techniques, with such information forming an integral part of their operations. This goal could be achieved by aspects of national training policy being formally 'referred' to the National Research and Evaluation Committee (NREC) or other bodies for evaluation, and developing 'showcase' examples of quality assurance mechanisms which incorporate evaluative approaches.
- *A capacity to evaluate*
  All levels of vocational education and training need sufficient people skilled in carrying out evaluative activities and interpreting the results—particularly staff within State training authorities, industry training advisory bodies (ITABs), and training providers. This could be achieved by facilitating forums of managers to discuss quality assurance issues, by arranging for the critical appraisal of evaluative studies, and by other mechanisms to develop expertise within all groups of stakeholders.
- *An informed and robust critique*
  Public policies and practices should be subject to better-informed critique—both publicly and, when deemed necessary, in confidence. This could be achieved by writing this expectation into contracts for national key research centres.

Over the last few decades evaluation has been used only sporadically in vocational education and training—and less than in other sectors of education—to improve educational outcomes. There is now a real opportunity for it to make an effective contribution to decision-making in vocational education and training through the national strategy, and this discussion paper is intended as a first step.

1 Background

The term 'evaluation' refers to gathering data and using it to exercise informed judgement about a program. It is something we all do quite routinely, from making decisions about whether or not to discontinue some major government program, to deciding whether to buy a particular book. By its focus on the formulation of significant questions, data gathering, analysis and subsequent action it can assist the decision-making process at all levels, and can help to improve policy and practice.[1]

Evaluation is neither new (the term, with its current use, has been around since the late 1940s), nor revolutionary, nor often explicitly recognised, and is often not recorded.

It has also been little used for the improvement of vocational education and training (VET) in Australia. It is this lack of evaluation—which is neither publicly acknowledged or effectively used—that has prompted this discussion paper.

1.1 Context

The changes that have occurred in vocational education and training over the last decade have profound implications for the role of evaluation. There has been a transition from a supply-side system to one which is moving towards demand-side structures, with funding more tied to outputs rather than inputs; the range of training providers is becoming more diverse; and there has been a change in emphasis from external controls to quality assurance mechanisms. Equally significant is that these transitions have occurred in a system in which there has been considerable integration of policy-making and practice which crosses the boundaries of both traditional federal/State jurisdictions and government/industry responsibilities. All of these developments lead to a strong case for the development of new forms of accountability.

Perhaps as a result of this, the importance of the evaluation of vocational education and training is acknowledged in the Australian National Training Authority (ANTA) report *A bridge to the future*.[2] This states that 'research and evaluation findings will be used for continuous improvement and for future policy and program development', with strategies described to monitor the extent to which the national objectives are attained.

However, overall it would have to be acknowledged that there has been, to quote Malley, Lamb and Long (1997), 'an ambivalence within central agencies to research and reconcile the administration of policies and programs with actual outcomes and experiences of students'.[3]

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1 The focus of evaluation on better-informed discussion and professional decisions has led to this paper being titled *Towards evidence-based vocational education and training*, by analogy with the movement to evidence-based medical practice.

2 Australian National Training Authority (ANTA) 1998, *A bridge to the future: Australia's national strategy for vocational education and training 1998–2003*, ANTA, Brisbane.

3 Malley, J, Lamb, S and Long, M 1997, 'Youth, VET and work: Through a partial looking glass', paper delivered at the national issues forum, Young People and Work: Is VET the Answer?, University of Technology, Sydney, December 1997.

1.2 Previous work

There have been three recent significant studies of the state of evaluation in Australia:

- a review of evaluations of the national vocational education and training system[4]
- a guide to evaluation studies—commissioned by ANTA—which located 122 studies post-1990, half of which were concerned with programs, schemes and processes[5]
- an overview of evaluation and its use in vocational education and training[6]

These reports have served as the starting-points for this discussion paper.

1.3 Further development of the national strategy

The *National research and evaluation strategy* is based on the assumption that there is a need for more and better research, and that such a strategy will, in turn, create a body of research that will resource policy and practice. This is entirely appropriate, particularly given the historically low levels of investment in research in the past. Australia is also the only nation with such a strategy.

The same arguments do not apply to the development of an evaluation strategy. More and better evaluations will not necessarily improve the system: it is the way they are used that is the key.

The difference between research and evaluation relates to the level of connection and influence between the product (a research or evaluation study) and the user. Research can be profitably used—and indeed has been profitably used—by those with no connection to the researcher, and who may be separated by decades and/or continents. Evaluations, on the other hand, do not have such effects; their utility is judged solely on the ways in which they exert direct influence. In fact, unlike research, the very act of conducting an evaluation renders it out of date.

Thus we do not need more and better evaluations: we need structures and systems and ways of thinking that are based on informed judgement—for which competent evaluations are the fodder.

It is for this reason that there is a national strategy which covers both evaluation and research. This discussion paper is intended to lead to the further development of those aspects of the national strategy which focus on evaluation.

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4 ANTA 1996, 'Review of evaluations of the national vocational education and training system', ANTA, Brisbane, unpublished report.

5 McDonald, R, Hayton, G and Melville, B 1997, *A guide to recent Australian literature in the evaluation of vocational education and training*, Research Centre for Vocational Education and Training, University of Technology, Sydney.

6 McDonald, R and Hayton, G 1998, 'A brief history of the evaluation of VET in Australia', in *Readings in Australian vocational education and training research*, eds C Robinson and P Thomson, National Centre for Vocational Education Research, Adelaide.

2 The dimensions of evaluation

2.1 Evaluation: For what purpose?

Traditionally, evaluation activities have been described as being either 'formative' (where the primary intent is to improve) or 'summative' (where the primary intent is to make a judgement). Although this binary division has been criticised from time to time, it continues to form the basis of decisions which affect the nature of evaluations that are carried out, and has played a useful role in helping evaluators focus on the prime purpose of an evaluation.

A more useful distinction describes four overlapping purposes of evaluation:[7]

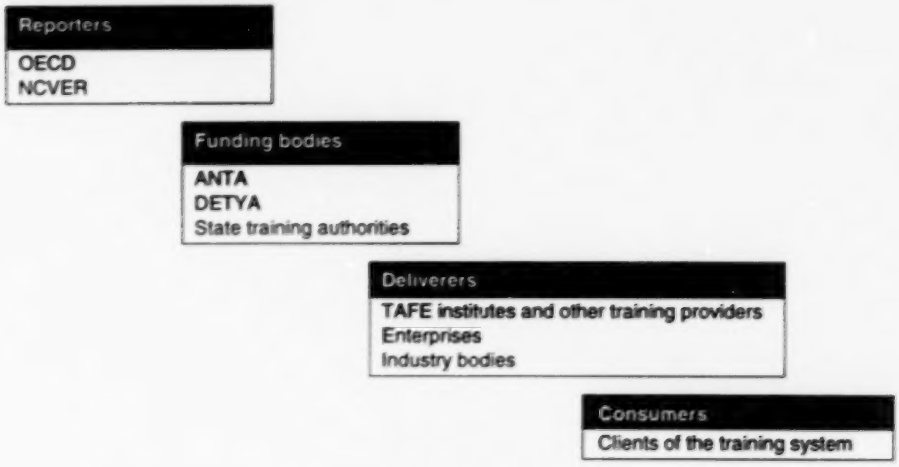
- *Proving* means demonstrating that something has happened as a result of some education or training activity.
- *Improving* concerns making processes better than at present.
- The purpose of *learning* recognises the benefit of regarding evaluation as an integral part of the development process.
- *Controlling* refers to the use of evaluation data to ensure that pre-determined standards are being met.

A fifth purpose, *ritual*, recognises that evaluations are sometimes carried out for no other reason than that they are thought to be desirable, and with little prospect of them influencing policies or practice.

[7] Adapted from Easterby-Smith, M 1994, *Evaluating management development, training and education*, Gower, Aldershot, Hampshire.

2.2 Evaluation: By whom?

It can be helpful to think of those who carry out evaluations—gathering the data and making judgements based on it—under four headings: reporters, funding bodies, deliverers and consumers.



2.3 Evaluation: Using which approach?

In the 20 years following 1967, over 50 different evaluative models were developed.[8] These can best be categorised under the following approaches:

- *testing-objectives*—in which testing procedures are used to determine whether the objectives of a program have been met (of which audits are an extreme example)
- *decision-management*—(approaches such as the CIPP model: context, input, process and product) which have been developed to meet the needs of managers of educational programs
- *research*—in which evaluation is seen as a branch of social research with an emphasis on the generation of new knowledge
- *policy analysis*—focusing on national issues and directed towards those who frame national policy
- *adversarial*—modelled on processes in the justice system, in which alternative approaches are proposed and public positions taken on them
- *judgement*—using the professional judgement of experts (for example, the model traditionally used in accreditation)
- *pluralist-intuitionist*—which covers models which are committed to accepting and valuing multiple objectives

These approaches are summarised in the *International encyclopedia of education*.[9]

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[8] Worthen, BR and Sanders, JR 1987, *Educational evaluation: Alternative approaches and practical guidelines*, Longman, New York.

[9] Smith, NL 1994, 'Evaluation models and approaches', in *International encyclopedia of education*, 2nd edn, eds Husen T Torsten and T Neville Postlethwaite, Pergamon, Oxford.

3 Current evaluation activities

Evaluation is currently carried out at a variety of levels—although in many cases it is not described as 'evaluation'. The different areas of focus are outlined below, from the largest scale to the smallest.

3.1 Evaluation of national performance

The point has been made that 'there is plenty of evidence to suggest that most countries are wasting scarce [VET] resources because of a failure to adequately monitor and evaluate', and that without such processes, 'resources are allocated more on the basis of past practice than on any systematic analysis of future requirements'.[10]

In Australia, however, the VET sector has extensive and sophisticated information requirements for which there are a range of data sources, reporting instruments and outputs; in fact, the development of monitoring systems for VET over the last ten years must be counted as one of the sector's major successes. The sector now has an advanced management information system for institutional data and a developing framework for performance measurement nationally. Many of these are 'surrogate' measures which are oriented to the performance of institutions and systems rather than more significant outputs (such as the educational outcomes of students). However, the systems established within the VET sector put it ahead of many other service providers—including other education providers—with figures being available on throughput, cost-effectiveness, quality, and comparisons between achievements in different States.

This is the result of rigorous and collaborative effort on the part of all stakeholders. Since the Boston Consulting Group reported to ministers on the quality and comparability of data in the sector in 1995, further improvements have been forthcoming.

The principal information sources are:

- a current national collection of VET data which encompasses:
  - the annual collection of institutional or provider data against the Australian Vocational Education and Training Management Information Systems (AVETMIS) Standard: *Australian VET statistics*
  - the annual collection of financial data: *National financial data on VET*
  - the quarterly and annual collection of apprentice and trainee data: *Australian apprentice and trainee statistics*
  - a suite of national surveys currently including the reports of both the student outcomes and employer views of VET surveys published late in 1999, as well as a range of education and training surveys conducted by the Australian Bureau of Statistics

[10] Robinson, C in press, 'Why monitor? Why evaluate? The importance of the feedback loop in TET', in *Leading change in technician education and training*, Colombo Plan Staff College for Technician Education, Manila.

- a suite of VET data collections, managed by NCVER, which underpins national reporting arrangements
- data on skills outputs (see appendix 1)

Information by itself is not the same as evaluation, which requires that a judgement be made on the basis of available information. The reports discussed below use the available information to make judgements on the performance of the system:

- The annual report on performance within each State and Territory[11] which is the most detailed and timely report produced on the sector. Performance measures used in the last report were grouped into the following categories:
  - participation
  - graduate destinations
  - employer satisfaction with VET
  - successful outputs in VET
  - unit costs
  - actual and planned delivery
- Data which aim specifically to measure progress toward meeting the objectives of *A bridge to the future*:
  - equipping Australians for the world of work
  - enhancing mobility in the labour market
  - overcoming skill development and recognition problems for target groups
  - increasing investment in training
  - maximising the value of public VET expenditure
- Evaluative information is also provided by a number of State instrumentalities—for example, the NSW Council on the Cost of Government provides reports on a number of areas of government in the form of *Service efforts and accomplishments* (SEA) reports. These reports aim to consolidate expenditure in an area of government activity and match this against appropriate measures of inputs, outputs and outcomes. A section on TAFE provision provides a useful model of inputs, outputs and outcomes (see appendix 1).

More recently[12] ministers agreed to a raft of supporting planning and accountability arrangements in addition to endorsing *A bridge to the future*. These are:

- annual national priorities
- national key result areas
- national and State/Territory performance indicators

These latter focus on policy implementation issues flowing from the over-arching national strategy. In addition, the requirements of the new ANTA agreement for growth through efficiency have their own set of information and reporting requirements. The capacity for any of these instruments to meet effectively State requirements is necessarily limited to what can

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[11] ANTA 1997, *Vocational education and training performance*, Annual national report, vol. 3, ANTA, Brisbane.

[12] Ministerial Council meeting, April 1998.

be achieved through national agreement: a more discriminating approach is needed to give full effect to what jurisdictions individually may want to achieve.

Beyond these measures, international comparisons can also be useful in illuminating how Australia's performance compares with other countries. Member countries periodically invite the Organisation for Economic Co-operation and Development (OECD) to monitor progress towards the realisation of particular goals. An example of a recent activity is the OECD thematic review.[13]

3.2 Evaluation of policies and national initiatives

Until recently, evaluation of policies affecting vocational education and training has not been a major priority for governments. This has had one disturbing effect, apart from the lack of information on which to base changes: there is a lack of people with the expertise both to carry out credible evaluation and to conceptualise and communicate an evaluative study in a way that is useful to those framing policy.

There have, however, been a number of evaluative activities which have been recently conducted or initiated:

- evaluation of particular initiatives—for example, user choice, frontline management initiative, staff development for competency-based training, Australian Vocational Training System pilots
- evaluations based around particular concerns—for example, the many studies of cross-sectoral collaboration commissioned by the Department of Employment, Training and Youth Affairs (DETYA)
- evaluations of structures and policies—for example, the review of the ANTA Agreement, the review of ITABs

There have not tended to be evaluations of the implications of national policies for providers, although this is to some extent being remedied by some recent work—for example, some recent evaluations of the effects of competency-based training.

Of more concern, however, is that results of evaluations, even when they might contribute to the formation of policy or to changes in practice, are rarely made available in a form which will facilitate their use by those framing policy.

3.3 Evaluation of practice

It is in this area that the need for the development of strategies and skills is most marked. TAFE institutes, private training providers, and enterprises which carry out their own training all have a need for their decisions to be informed by systematic evaluation. Yet the level and degree of professionalism of activity is uneven. This is true even though all providers know that, to play an effective role, evaluative activities need to become integral to a provider's operation, rather than merely an activity to be carried out in response to immediate information needs.

[13] OECD 1998, *OECD education committee thematic review: The transition from initial education to working life*, OECD, Paris.

In the best examples, it is possible to find a history of professionally conducted evaluations (often as part of a course-maintenance process) with the more recent development of:

- processes adapted from quality assurance mechanisms such as ISO 9001
- benchmarking of particular activities
- monitoring of outcomes

These are very significant developments, in that they have given institutions a legitimate role in monitoring their performance, with the focus being on the best mix and range of programs, and the maintenance of reputation. In Victoria this has been extended by the development of a quality management framework which makes self-evaluation obligatory for all training providers.

More typically, however, TAFE institutes and other providers are struggling to develop systematic approaches to evaluation. There might well be a number of evaluative activities occurring within a given institution, and the high level of professionalism of many teaching staff will ensure that self-critique is common. However, the difficulty lies in the way that these activities are integrated into the decision-making structure of a particular institute, and the restricted view of the range of evaluative activities. For example, there is now material available on how to examine the cost of assessment[14] and other activities[15], but this is rarely carried out.

One of the reasons for these difficulties—particularly at the level of individual instructors—lies in the changing nature of the teaching workforce among providers. With the decrease in the proportion of long-term tenured staff has come a decrease in those committed to the institution, and an increase in casual staff who see themselves as employed to carry out specific training—but who inevitably have a low level of commitment to the institution's reputation.

Another issue is the capacity of the thousands of small registered training organisations, in which it would be unrealistic to expect there to be the expertise to evaluate in a professional manner.

It is also rare to find, in institutions, an understanding of 'evaluating for success'—structuring evaluation into new initiatives so that helpful, formative, information is obtained at critical stages rather than waiting until later.

This approach is reflected by the focus of guides to evaluation currently available. There is no shortage of evaluation guides and staff development kits that, in 20–200 pages, describe how programs may be evaluated, and guide practitioners through the process step by step.

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[14] McDonald, R 1996, *A billion-dollar investment: Measuring the cost of assessing vocational skills*, Assessment Centre for Vocational Education, TAFE NSW, Sydney.

[15] Phillips, JJ 1997, *Return on investment in training and performance improvement programs*, Gulf, Houston.

Some examples are given in the following table:

Evaluation guides and staff development kits	
Title	**Comments**
Evaluation guide for the review of VET programs [16]	These guides outline common types of evaluation and a number of tools which practitioners can use to evaluate courses and programs.
A guide to program evaluation [17]	
Evaluation kit: Making a world of difference to training [18]	
Professional development for program evaluation: Evaluation for adult literacy and basic education programs [19]	
Informed professional judgment: A guide to evaluation in post-secondary education [20]	Although 15 years old and written for the higher education sector, still a useful reference. As well as having a variety of examples and case studies it focuses on the purposes of evaluation.
Getting to grips with evaluating training [21]	Like others in the *Getting to grips with ...* series, this guide provides a readable and effective introduction to the scope, contexts, purposes and methods of evaluation.

However, these guides and kits are based on a fairly traditional model which focuses on 'evaluation' rather than on the incorporation of evaluative ideas into practice, with the exception of *Getting to grips with evaluating training* and *Informed professional judgment,* which place evaluation in its broader context. Many of the available guides tend not to canvas the range of evaluative approaches and could appear daunting to all except the very enthusiastic, unless used in a setting in which there was strong organisational support. They also lack, on the whole, guidance to help those using them decide on the utility or cost-effectiveness of various approaches, how such activities might fit within an overall organisational concern for quality, or how to ensure currency of information taught to students and trainees.

[16] Guthrie, H 1995, *Evaluation guide for the review of VET programs*, NCVER, Adelaide.

[17] Lambert, F and Owen, J 1990, *A guide to program evaluation*, Department of Education, Employment and Training, Canberra.

[18] Goleby, A and Clayton, B 1999, *Evaluation kit: Making a world of difference to training*, version 3.1, Canberra Institute of Technology, Canberra.

[19] National Staff Development Committee 1995, *Professional development for program evaluation: Evaluation for adult literacy and basic education programs*, National Staff Development Committee for VET, Chadstone, Victoria.

[20] Roe, E and McDonald, R 1984, *Informed professional judgment: A guide to evaluation in post-secondary education*, University of Queensland Press, Brisbane.

[21] Guthrie, H 1994, *Getting to grips with evaluating training*, NCVER, Adelaide.

3.4 Evaluation of training provision by consumers

The recipients of vocational education and training are students, potential students, employers and potential employers. They are also evaluators, both in terms of making a decision as to where to undertake training and in evaluating the worth of the training itself. Their need to evaluate grows stronger with the number of choices they have for a training provider, and their focus is likely to be on the quality of the training, the reputation of the provider, and the overall 'rightness of fit' of the institution.

Enterprises are also 'consumers', and there is little evidence that the skills exist within most enterprises to make well-informed decisions about the extent to which training is likely to assist the business purpose, and then to choose between training providers.

3.5 Critique

Seven years ago a report proposing a national strategy for research[22] identified the lack of a strong critique of policies and programs as a barrier to beneficial and long-lasting changes to Australia's VET system, and pointed to the fact that the massive changes in vocational education and training had attracted very little informed discussion or comment.

Little has changed. One could count on the fingers of a very small hand the number of people who contribute constructively to public discussion and debate about the purposes and structures of vocational education and training. Although there are numerous occasions on which policy and practice are subjected to critique by those involved—for example, meetings of TAFE institute directors, ITAB meetings and discussions within State training authorities—few of these discussions go outside the immediate group and only rarely do they prompt thoughtful debate in the broader community.

3.6 Quality and capacity

In general, the theory base of educational evaluation has not moved significantly for over a decade. (One might kindly say that the 1980s and 1990s have been a time for consolidation and application rather than innovation—for example, in a recent useful review of evaluation[23] over two-thirds of the references were to papers prior to 1980.)

In the vocational education and training sector, however, there appears to be little or no understanding of *even* the theoretical base developed in the 1970s. Many evaluation studies seem unaware of their approach and theory base and, overall, there has been little communication between the different schools of evaluation and between different types of application.

This is not surprising. Much of the evaluative work carried out over the last decade has been done in secret—often by those external to the system—with the results not being released. This has created a whole body of work that does not add to cumulative knowledge, and that

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[22] McDonald, R, Hayton, G, Gonczi, A and Hager, P 1992, *No small change: Proposals for a national research and development strategy for vocational education and training in Australia*, Report to the Vocational Education, Employment and Training Committee, University of Technology, Sydney.

[23] Athanasou, J 1995, 'Issues in the evaluation of adult education', in *Understanding adult education*, ed. G Foley, Allen and Unwin, Sydney.

has not been exposed to critique. It has also, due to the infrequent use of people within the sector as evaluators, not played a significant role in developing a skills base within the sector.

The public scrutiny of evaluations will only arise from a more open approach to the availability of information—an issue on which there is currently enormous variation between different jurisdictions. The skills base is a more tractable issue, but it will not be successfully addressed merely by the availability of more guides and printed material.

Those who understand the process of dissemination and learning know that the focus of dissemination initiatives and strategies needs to be to change people, not to deliver information.[24] This 'people come before products' approach means, for example, that the following three dissemination strategies are of *decreasing* effectiveness:

- 'people-centred'—getting people together to exchange and interpret information
- 'people-assisting'—helping people in the field obtain information and make choices
- 'information-centred'—distribution of material

The implication here is not that 'information-centred' and 'people-assisting' initiatives and strategies are to be avoided, but rather that by themselves they are unlikely to prove effective. The most effective strategies are 'active' ones which involve the stakeholders rather than merely feeding them information. These are also the most difficult to achieve.

3.7 Where we stand

Looking at the progress made in evaluation, we can summarise the situation very broadly in the following table according to the level of focus of evaluative activities:

	National	State/Territory	Local (providers/ITABs)
Levels of activity	Quantitative: OK Qualitative: development needed	High in one or two States; low elsewhere	Highly variable
Capacity to evaluate	OK	High in one or two States; low elsewhere	Generally low; some pockets of high skill
Critique	Little	Largely absent	Generally low; some pockets of high skill

[24] McDonald, R, Hayton, G, Gonczi, A and Hager, P 1992, *No small change: Proposals for a national research and development strategy for vocational education and training in Australia*, Report to the Vocational Education, Employment and Training Committee, University of Technology, Sydney.

4 Extending the evaluation aspects of the national strategy

It would be unrealistic to expect all activities to be evaluated. Evaluation is not always worth doing: sometimes it is not an effective use of resources, it may not always be an appropriate response, and in a number of cases the will to evaluate does not exist. What a national strategy can achieve, however, is a number of outcomes which will assist the use of evaluative methods to support decision-making.

This could be done by extending the existing *National research and evaluation strategy* to achieve the following additional outcomes:

- a useful level of evaluative activities
- a capacity to evaluate—both sufficient people skilled in carrying out evaluative activities and interpreting the results, and better-informed policy-makers who are able to judge how evaluative studies can assist policy development
- an informed and robust critique

These three outcomes are described below.

4.1 A useful level of evaluative activities

Although all three outcomes above are important (and to some extent complementary) it is this one that has the greatest potential to improve the quality of education and training. The focus here needs to be on evaluation of national initiatives and evaluative activities at local level, not on the quantitative evaluation of overall vocational education and training performance which, by international standards, is being carried out effectively.

At a local level, the emphasis needs to be on the development and routine use of evaluative approaches within an overall framework, rather than on merely carrying out evaluations.

The outcome

To achieve a situation in which training providers and enterprises plan and make decisions on the basis of a sensible and systematic use of evaluative techniques, with the use of the evaluative information forming an integral part of their operations.

	Goals	Strategies
1	Evaluation of major policy initiatives occurs regularly	Recommend that ANTA Ministerial Council regularly provide NREC with a reference to evaluate a particular aspect of national training policy or national initiative. (Some suggestions are given in appendix 2.) Commission 'micro-level' analyses to enable two or three training providers to compare, in detail, the cost-benefits of particular aspects of their operation.

	Goals	Strategies
2	Training providers routinely carry out a range of evaluative activities as an integral part of their quality assurance process	Invite bids from VET providers to develop 'showcase' examples in which there are effective mechanisms for using evaluative information as part of an overall quality assurance process. The focus needs to be on obtaining both formative evaluative information ('evaluating for success') as well as summative, and with a focus on utility and cost-effectiveness.
3	Every teacher and trainer is a 'self-evaluator'	Commission the development of guides and frameworks which can be used by training providers *at a whole-organisation level*, rather than by individuals acting alone.

4.2 A capacity to evaluate

Good policy-making and good thinking about changes to practice require that those who provide the information are expert at understanding it. It is hard to find anyone whose considered view is that sufficient expertise exists at State/Territory level in most States, or at local level, to enable evaluation to play the role that it could. Expertise is needed to assist people to make reasonable estimates of when evaluation might assist—and when it might not—to commission evaluations, and to interpret and critique the results.

The outcome

A situation in which State training authorities, ITABs, and training providers have staff with the understanding to conduct and use evaluative methods for improved decision-making.

	Goals	Strategies
4	There is sufficient understanding of evaluative methods and how they can be applied to enable evaluation to contribute to decision-making	Facilitate forums of managers to discuss quality assurance issues. Commission the preparation of a Graduate Certificate (by flexible delivery) on research and evaluation in vocational education and training, linked in to workplace-based evaluative activities. Arrange for the critiquing of evaluative studies (at both concept and final report stage) by someone skilled in evaluation, and for a response to be invited from the evaluator.
5	Researchers and practitioners are able to write effectively for an audience of policy-framers	Develop and run seminars in which particular evaluations and their policy implications are 'workshopped'.
6	Those within State training authorities and ITABs know how to commission and use evaluation, and how to 'read' the results	A series of workshops, following the recent successful research and policy briefings, should be developed and offered to all State training authorities, focusing on evaluation within the broader contexts of system performance, benchmarking and quality assurance procedures.

4.3 An informed and robust critique

Critique is not the same as criticism: it is not merely opinion or polemic, nor is it only delivered in a public forum. The term is used here to signify an informed commentary on some aspect of vocational education and training policy or practice.

The outcome

A situation in which it becomes the norm for public policies and practices to be subject to informed critique—both publicly and in confidence—by policy agencies.

	Goals	Strategies
7	Critique informs debate and decisions (in both public and private forums)	Recommend that ANTA write into its agreement with national key centres an expectation that each centre will undertake to prepare critiques on a number of topics each year
8	There is a capacity to critique among researchers, practitioners and other interested parties	Arrange for feedback to be provided to those providing critique by those with policy and research experience

4.4 Where to from here?

This discussion paper is intended to form the basis of consultations which NCVER will conduct with those who share a concern about how evaluative studies can lead to better decisions. While it is beyond the scope of this discussion paper to suggest what the priorities should be, when deciding on priorities it might be helpful to think of the above goals under two headings:

- goals 1, 2 and 3: use of evaluations to assist decision-making
- goals 4, 5, 6, 7 and 8: building the capacity to evaluate

The reason for making this distinction is that although they are obviously interconnected (for example, carrying out evaluations has the result of building the capacity to evaluate, and cannot occur unless there is some capacity in the first place), there should be different mechanisms for setting priorities within a national strategy:

- goals 1, 2 and 3 will only be fulfilled if all parties (the Ministerial Council, ANTA, State training authorities, providers and enterprises) are committed to evaluation as an integral part of their operations; it would make sense, therefore, if priorities were set with considerable input from the potential users
- goals 4, 5, 6, 7 and 8, on the other hand, focus on building an overall capacity, and might best be addressed within the mechanisms already in place within the National Research and Evaluation Committee

Over the last few decades evaluation has been used sporadically, although sometimes effectively, to measure and then improve educational outcomes. Compared with its use in other sectors of education, it has been little used in vocational education and training. There is now a real opportunity for it to make an effective contribution to decisions in VET, and this discussion paper is intended as a first step.

Appendix 1

The performance of the VET system: Further details

ANTA annual national report

This annual report on performance in VET within each State and Territory (volume 3: *Benchmarking VET*) is the most detailed and timely report produced on the sector. Performance measures used in the last report were grouped into the following categories:

- participation
- graduate destinations
- employer satisfaction with VET
- successful outputs in VET
- unit costs
- actual and planned delivery

A new set of measures has been developed by the Performance Review Committee, placing greater emphasis on outcomes and efficiencies. These new key performance measures (KPMs) are:

KPM 1	Skill outputs produced annually within the domain of formally recognised VET
KPM 2	Stocks of VET skills against desired levels (including expressed industry demand)
KPM 3	Employers' views on the relevance of skills acquired through VET
KPM 4	Student employment outcomes and prospects before and after participation in VET
KPM 5	VET participation, outputs and outcomes achieved by client groups
KPM 6	(Actual) public expenditure per publicly funded output (units of competency and qualifications—not in place until year 2000/01)
KPM 7	(Actual) public expenditure per total recognised output

In presenting these indicators in its *Directions and resource allocations for 1998*[25], ANTA signals its intention to use the efficiency measures in KPMs 6 and 7 to make more reliable comparisons of VET systems between the States.

[25] ANTA November 1997, *Directions and resource allocations for 1998*, ANTA report to the Ministerial Council, ANTA, Brisbane.

Skills outputs

Of particular significance in any discussion of VET performance measures is the measurement of skill outputs. The sector as a whole is held in some question because of its inability to agree on what it is that students or clients actually get from undertaking training. This is also fundamental to the capacity of the sector to measure progress against its key objectives and to refine its services and products to attract and expand on its current clientele.

The current approach to measurement of skill outputs is based on the following measures:

- successfully completed qualifications
- successfully completed modules
- successfully completed units of competence

These have been modified through more recent work undertaken by NCVER and encompass:

- a simple count of units of competency and qualifications completed
- a VET Skills Index
- an Australian Qualifications Index

Further work is currently being undertaken by ANTA and NCVER to improve the measurement of skill outputs.

NSW Council on the Cost of Government

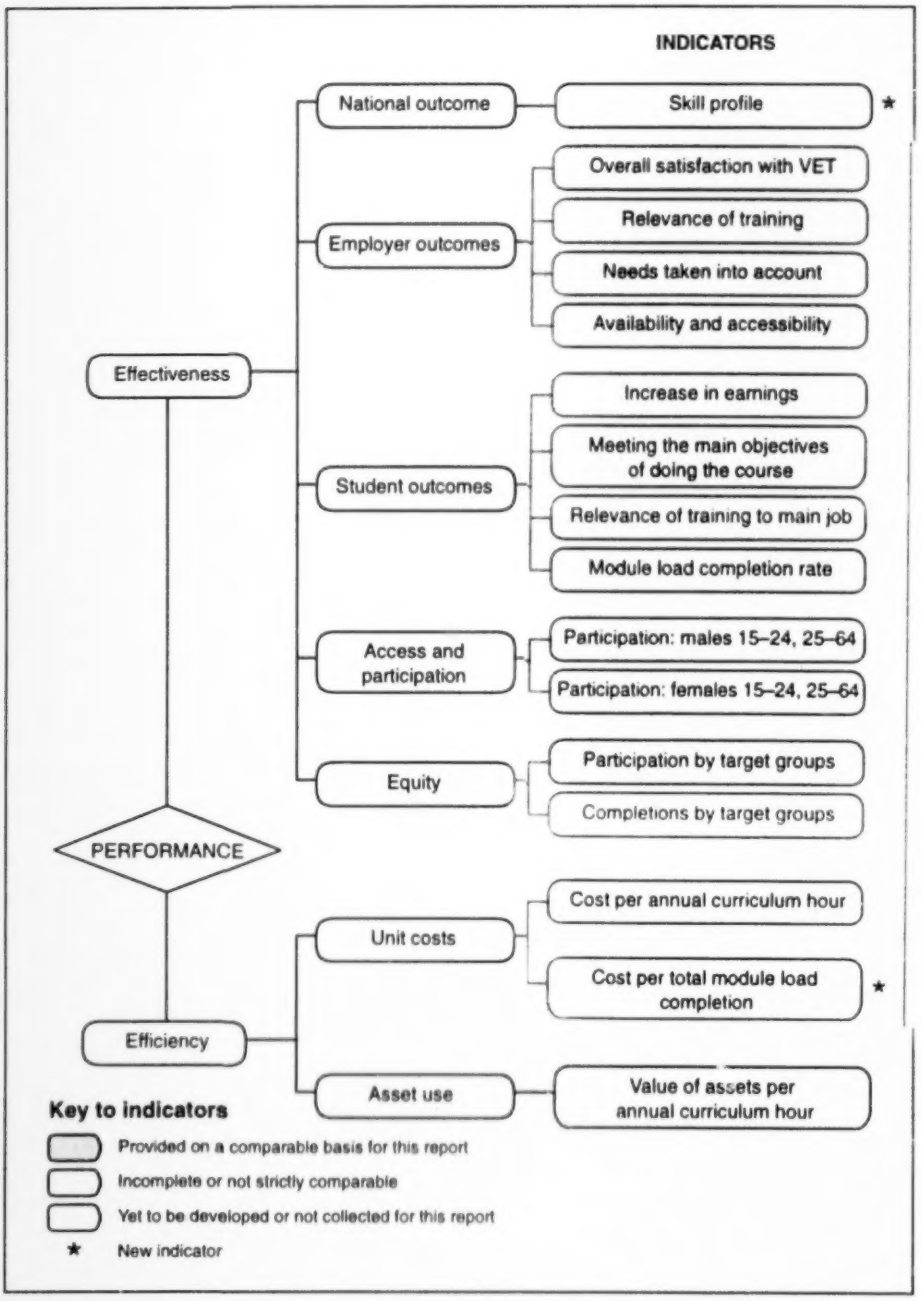
The NSW Council on the Cost of Government provides reports on a number of areas of government in the form of *Service efforts and accomplishments* (SEA) reports. These reports aim to consolidate expenditure in an area of government activity and match this against appropriate measures of inputs, outputs and outcomes. The section on TAFE provision provides a useful model of inputs, outputs and outcomes and is reproduced in the following table:[26]

Inputs	Outputs	Outcomes
Full-time equivalent employees	Enrolments	Employer satisfaction
Expenditure Unit cost—Annual hours curriculum	Student numbers Courses offered Student contact hours Module load completion rate	Relevance of course to current job Post course destination
	Graduates by industry group	Equity
	Participation rates	Graduate satisfaction with courses and teaching

[26] Source: Council on the Cost of Government 1997, *Service, efforts and accomplishments report*, chapter 3, www.occg.nsw.gov.au/pubs

Productivity commission performance indicators for VET [27]

Boxes marked with an asterisk indicate newly developed indicators.



[27] Productivity Commission 1998, *Report on government services 1998*, Productivity Commission, Canberra, p.154.

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Appendix 2

Some possible topics for evaluation of national initiatives

- risk-assessment models to assure the quality of registered training organisations
- New Apprenticeships
- purchaser–provider arrangements
- the extent to which the effort to create a true 'market' has succeeded
- delivery of material designed in accordance with training packages